## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

## **Listing of Claims:**

1. (original) A semiconductor device having a pad formed by exposing a predetermined region of a metal line formed over a semiconductor substrate, the semiconductor device comprising;

an alloy layer formed on the metal line exposed through the pad, wherein the alloy layer is formed from a reaction between the metal line and a metal having a melting point less than or equal to 1000°C.

- 2. (original) The semiconductor device of claim 1, wherein the metal line is made of copper.
- 3. (original) The semiconductor device of claim 1, wherein the metal having the melting point less than or equal to 1000°C is selected from the group consisting of aluminum, lead, and silver.
- 4. (original) The semiconductor device of claim 1, wherein the thickness of the alloy layer is less than a thickness of the metal line.
- 5. (original) The semiconductor device of claim 1, wherein a protection layer made of one of silicon nitride and silicon oxynitride is formed on the metal line except where the pad is formed.
- 6. (original) The semiconductor device of claim 2, wherein the copper is filled in a via.

7. (original) The semiconductor device of claim 6, wherein a barrier metal is formed on an interface between the copper and the via made from a metal selected from the group consisting of Ti, Ta, TiN, and TaN having a thickness between 200 and 800Å to prevent the diffusion of the copper out of the via.

8. (original) The semiconductor device of claim 6, wherein a width of the pad is less than a width of the via.

Claims 9-20 (canceled).